

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Art Unit 2624

Rhoads et al.

Confirmation No. 4084

Application No.: 10/797,617

Filed: March 9, 2004

For: IMAGE PROCESSING USING  
EMBEDDED REGISTRATION DATA TO  
DETERMINE AND COMPENSATE FOR  
GEOMETRIC TRANSFORMATION

VIA ELECTRONIC FILING

Examiner: A. Allison

Date: March 1, 2010

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Sir:

Appellants request review of the final rejection in the above-identified application. No amendment is being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheets. (No more than 5 pages are provided.)

Date: March 1, 2010

Respectfully submitted,  
DIGIMARC CORPORATION

*Customer Number 23735*

Telephone: 503-469-4800

FAX: 503-469-4777

By /Joel R. Meyer/  
Joel R. Meyer,  
Reg. No. 37,677  
Attorney for Applicant

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**REASONS FOR REQUEST FOR PRE-APPEAL REVIEW**

Sir:

Responsive to the final Office Action dated October 28, 2009, Applicant files herewith a notice of appeal, a request for pre-appeal brief review, and the following reasons for requesting the pre-appeal review.

The patent application has been finally rejected on the grounds that:

- The priority patent 5,862,260 lacks written description support;
- Due to the lack of support in the priority document, the claims are rejected under 35 U.S.C. Section 102(e) as being anticipated by U.S. Patent No. 6,741,758 to Hayashi et al. ("Hayashi")
- Claim 15 is rejected under the judicially created doctrine of obviousness type double patenting over claim 1 of U.S. Patent No. 6,424,725.

In addition to the above issues, the Office has cited regulations related to interferences, yet no pending claims are copied from U.S. Patent 6,741,758, which is the only patent issued from US 2001-0055390. While it is correct that Applicant filed a notice of copied claims related to US 2001-0055390 (later issued as 6,741,758) with the transmittal of this application, both the claims in US 2001-0055390 and this application have been amended since the submission of that notice.

In response to the earlier non-final action, Applicant amended the claims and provided a detailed chart illustrating examples of support for the claims. These examples of support provide both a showing of written description in the specification, and also show support in the priority patent 5,862,260 (the '260 patent) because the '260 patent is incorporated by reference in the patent application.

The alleged deficiencies in the support provided in the '260 patent are not correct:

- At page 2 of the final rejection, the Office states: "For the limitation 'subjected to geometric transformation', Applicant pointed to column 72, line 66 to column 73, line 3; however this portion of the patent does not describe subjecting to geometric transformation."

The phrase, "subjected to geometric transformation" is an excerpt of the preamble of claim 1, which begins: "An image processing method of inputting image data with registration signals embedded therein, subjected to geometric transformation..." The Office contends that the cited section at column 72, line 66 to column 73, line 3, "has nothing to do with subjecting to geometric transformation." The Office incorrectly refers to "subjecting to geometric transformation" whereas the preamble simply refers to an image processing method of image data "subjected to geometric transformation." This portion of the preamble is merely indicating that the recited image processing method pertains to image data that has been subjected to geometric transformation. Clearly, the cited passage in the '260 patent relates to processing image data that has been subjected to geometric transformations, such as rotation and scale. Indeed, the first sentence of the cited section at col. 72, line 6, states: "The very notion of reading embedded signatures involves the concept of registration." One of ordinary skill in the art would easily understand that image processing to perform registration is a form of image processing of image data subjected to geometric transformation. At col. 72, line 39, the '260 patent refers to determining the proper orientation and scale of underlying noise patterns in image data. At col. 73, lines 1-3, the '260 patent clearly refers to forms of geometric transformation that images are subjected to, including rotation, scale and offset.

- At the bottom of page 2 in the final rejection, the Office states: "For the limitation 'detecting registration signals from said inputted image data to perform registration

processing’, Applicant cited Figs. 37, Fig 33-36 and column 75, lines 13 to column 77, line 30. While it seems that the cited portion teaches ‘detection of registration signals’, ‘detection registration signals from said inputted image data to perform registration processing’ is not taught by the patent.”

Applicant respectfully submits that this allegation is clearly wrong. The subliminal graticules referenced at col. 75, line 13 of the ‘260 patent, are, without doubt, registration signals, because they are used to determine rotation and scale of the image data in which they are embedded, and are used to perform geometric registration of that image data. The cited passage at column 75, lines 13 to column 77, line 30, describes how to detect these subliminal graticules, and through this detection, determine the rotation and scale of the image data. The cited passage refers to “detecting” as searching for the subliminal graticules. This searching includes performing detection operations on the subliminal graticules in a suspect image like detecting peaks (see column 75, line 45) of the subliminal graticules (the peaks indicate the rotation angle of the subliminal graticule embedded in the image, and thus, the rotation of the suspect image itself). In addition, the searching for subliminal graticules is explained to include detection operations like performing matched filtering operations (see column 76, lines 10-40) to determine the scale of the suspect image. Additional detection of the subliminal graticules is explained to include a matched filter between the known profile of the subliminal graticule and the suspect image in which a subliminal graticule is embedded. See col. 76, lines 40-58 of the ‘260 patent. The suspect image is registered by simply reversing the rotation and scale that has been computed based on detection of the subliminal graticules. See, e.g., col. 78, lines 3-5.

- The Office’s final critique of the written description support provided in the ‘260 patent is to try to suggest that the statement at col. 77, line 23-25 relating to reduction to practice of one aspect of one embodiment, is somehow pertinent to the question of written description.

First, even assuming that this statement about reduction to practice is relevant to written description (which is not), it only pertains to the method of Fig. 36, which is only one example optimization that could optionally be used in conjunction with embodiments described in the specification. Fig. 36 relates to an optimization intended to provide computational savings. The

inventor's statement about the possible effectiveness of this approach does not mean that the other embodiments are tainted by it in any way.

Second, the inventor's statement regarding reduction to practice is not relevant to the issue of written description. The written description support provided in the figures and text, including more than just Fig. 36, clearly demonstrates that the inventor possessed the invention.

The portions of the final rejection on pages 4-7 are simply a copy of the earlier non-final action and fail to take into account the amendments that Applicant made to the claims in response to that non-final action.

Applicant is entitled to priority to May 16, 1996, and Hayashi is not prior art.

Claim 15 is rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claim 1 of U.S. Patent 6,424,725. Claim 15 recites, among other elements: "transforming the media signal into a frequency domain to produce frequency components of the media signal; detecting an embedded signal in the frequency components." Claim 1 of the '725 patent does not teach these elements. In particular, the act of "performing a logarithmic sampling of the media signal" in claim 1 of the '725 patent does teach a transform of the media signal into a frequency domain. Therefore, claim 15 of this application is not obvious in view of claim 1 of the '725 patent. The Office's response agrees that a logarithmic sampling does not require "transforming the media signal into a frequency domain," yet still concludes that this claim allegedly anticipates claim 15 of the application. This is illogical because, unless claim 1 of the '725 can be shown to disclose all of the elements of claim 15 of the application, it cannot anticipate that claim.

In view the above, the rejections should be withdrawn.

Date: March 1, 2010

Respectfully submitted,

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Telephone: 503-469-4800  
FAX: 503-469-4777

By Joel R. Meyer  
Joel R. Meyer  
Registration No. 37,677